

ABSTRACT OF THE DISCLOSURE

An adaptive method is provided for applying chirp to an optical signal traversing through an optical network. The adaptive method comprises: applying chirp to an optical data signal at a transmitter in the optical network; transmitting the optical data signal through the optical network, the optical data signal having error detection data embedded therein; determining an error rate for the optical data signal at an egress point of the optical network, where the error rate is based on the error detection data embedded in the optical data signal; transmitting the error rate for the optical data signal to the transmitter; and adjusting the chirp being applied to the optical data signal at the transmitter based on the error rate for the optical data signal.